

CLAIMS

1. A communication apparatus comprising:

a multiplexed data receiving unit for receiving

5 multiplexed data at least including audio data;

an extracting unit for extracting the audio data from the multiplexed data;

a telephone unit for transmitting/receiving telephone audio data;

10 an audio output unit for inputting one of extracted audio data that was extracted by the extracting unit and received telephone audio data that was received by the telephone unit, and outputting one of the extracted audio data inputted and the received telephone audio data inputted;

15 a switching control unit for switching an input to the audio output unit between the extracted audio data and the received telephone audio data; and

an instructing unit for detecting a receive event generation, a send event generation, and an end event generation,
20 and giving a prescribed instruction to the telephone unit, the extracting unit, and the switching control unit,

wherein the instructing unit, in a case of detecting one of the receive event generation and the send event generation while the multiplexed data is received by the multiplexed data
25 receiving unit, transmits a telephone audio data

transmission/reception start instruction to the telephone unit to start transmitting/receiving the telephone audio data, transmits an audio data extraction stop instruction to the extracting unit to stop extracting the audio data, and transmits
5 a received telephone audio data switch instruction to the switching control unit to switch to the received telephone audio data, and in a case of detecting the end event generation while the multiplexed data is received by the multiplexed data receiving unit, transmits a telephone audio data
10 transmission/reception stop instruction to the telephone unit to stop transmitting/receiving the telephone audio data, transmits an audio data extraction start instruction to the extracting unit to start extracting the audio data, and transmits an extracted audio data switch instruction to the switching
15 control unit to switch to the extracted audio data,

wherein the telephone unit, in a case of receiving the telephone audio data transmission/reception start instruction from the instructing unit, starts transmitting/receiving the telephone audio data, and in a case of receiving the telephone
20 audio data transmission/reception stop instruction from the instructing unit, stops transmitting/receiving the telephone audio data,

wherein the extracting unit, in a case of receiving the audio data extraction stop instruction from the instructing unit,
25 stops extracting the audio data, and in a case of receiving the

audio data extraction start instruction, starts extracting the audio data, and

wherein the switching control unit, in a case of receiving the received telephone audio data switch instruction from the instructing unit, switches the input to the audio output unit to the received telephone audio data, and in a case of receiving the extracted audio data switch instruction from the instructing unit, switches the input to the audio output unit to the extracted audio data.

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2. The communication apparatus according to claim 1, wherein the multiplexed data receiving unit receives multiplexed data including video data and text data, and

wherein the extracting unit extracts the video data from the multiplexed data, and also extracts the text data in a prescribed case,

the communication apparatus, further comprising:

a display output unit for outputting extracted video data that was extracted by the extracting unit, and for outputting extracted text data in a case where the text data was extracted by the extracting unit,

wherein the instructing unit transmits a text data extraction start instruction to the extracting unit to start extracting the text data in a case of detecting one of the receive event generation and the send event generation while the

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multiplexed data is received by the multiplexed data receiving unit, and transmits a text data extraction stop instruction to the extracting unit to stop extracting the text data in a case of detecting the end event generation while the multiplexed data
5 is received by the multiplexed data receiving unit, and

wherein the extracting unit starts extracting the text data in a case of receiving the text data extraction start instruction from the instructing unit, and stops extracting the text data in a case of receiving the text data extraction stop
10 instruction from the instructing unit.

3. The communication apparatus according to claim 1, wherein the audio output unit is an amplified audio output unit for amplifying volume of and then outputting one of the extracted
15 audio data inputted and the received telephone audio data inputted and outputting,

the communication apparatus, further comprising:

a ear audio output unit for outputting the received telephone audio data in a prescribed case; and

20 an amplified audio ear audio selecting unit for selecting one of the amplified audio output unit and the ear audio output unit, and making the one of the amplified audio output unit and the ear audio output unit output the received telephone audio data based on a selected result;

25 wherein the instructing unit transmits an amplified audio

select instruction to the amplified audio ear audio selecting unit to select the amplified audio output unit ,in a case of detecting one of the receive event generation and the send event generation while the multiplexed data is received by the
5 multiplexed data receiving unit, and

wherein the amplified audio ear audio selecting unit selects the amplified audio output unit in a case of receiving the amplified audio select instruction from the instructing unit, and makes the amplified audio output unit output the received
10 telephone audio data.

4. The communication apparatus according to claim 1, further comprising:

a multiplexed data reception start time managing unit,
15 for managing time for the multiplexed data receiving unit to start receiving the multiplexed data as multiplexed data reception start time, transmitting with an arrival of the multiplexed data reception start time a multiplexed data reception start instruction to the multiplexed data receiving
20 unit to start receiving the multiplexed data, and transmitting a multiplexed data reception start notification to the instructing unit of a start of receiving the multiplexed data by the multiplexed data receiving unit;

wherein the multiplexed data receiving unit starts
25 receiving the multiplexed data in a case of receiving the

multiplexed data reception start instruction from the multiplexed data reception start time managing unit, and

wherein the instructing unit judges whether the telephone audio data is being transmitted/received by the telephone unit upon receiving the multiplexed data reception start notification from the multiplexed data reception start time managing unit, and transmits the audio data extraction stop instruction to the extracting unit in a case where the telephone audio data is being transmitted/received by the telephone unit, so that the instructing unit does not transmits the extracted audio data switch instruction to the switching control unit.

5. The communication apparatus according to claim 2, further comprising:

15 a multiplexed data reception start time managing unit, for managing time for the multiplexed data receiving unit to start receiving the multiplexed data as multiplexed data reception start time, transmitting with an arrival of the multiplexed data reception start time a multiplexed data reception start instruction to the multiplexed data receiving unit to start receiving the multiplexed data, and transmitting a multiplexed data reception start notification to the instructing unit of a start of receiving the multiplexed data by the multiplexed data receiving unit;

25 wherein the multiplexed data receiving unit starts

receiving the multiplexed data in a case of receiving the multiplexed data reception start instruction from the multiplexed data reception start time managing unit, and

wherein the instructing unit judges whether the telephone
5 audio data is being transmitted/received by the telephone unit upon receiving the multiplexed data reception start notification from the multiplexed data reception start time managing unit, and transmits the text data extraction start instruction to the extracting unit in a case where the telephone audio data is being
10 transmitted/received by the telephone unit.

6. The communication apparatus according to claim 4 or 5, further comprising:

a vibrator; and

15 a vibrator control unit for controlling the vibrator;

wherein the instructing unit judges whether the telephone audio data is being transmitted/received by the telephone unit in a case of receiving the multiplexed data reception start notification from the multiplexed data reception start time
20 managing unit, and transmits a vibrator start instruction to the vibrator control unit to start the vibrator in a case where the telephone audio data is being transmitted/received by the telephone unit, and

wherein the vibrator control unit starts the vibrator in
25 a case of receiving the vibrator start instruction from the

instructing unit.

7. The communication apparatus according to claim 1, 2, 3, 4 or 5, wherein the communication apparatus is a mobile type
5 communication apparatus.

8. A communication method, comprising:

a multiplexed data receiving step for receiving
multiplexed data at least including audio data;

10 an extracting step for extracting the audio data from the
multiplexed data;

a telephone audio data transmitting/receiving step for
transmitting/receiving telephone audio data;

15 an audio output step for inputting one of extracted audio
data that was extracted by the extracting step and received
telephone audio data that was received by the telephone audio
data transmitting/receiving step, and outputting one of the
extracted audio data inputted and the received telephone audio
data inputted;

20 a switching control step for switching an input to the
audio output step between the extracted audio data and the
received telephone audio data; and

an instructing step for detecting a receive event
generation, a send event generation, and an end event generation,

transmitting/receiving step, the extracting step, and the switching control step,

wherein the instructing step, in a case of detecting one of the receive event generation and the send event generation while the multiplexed data is received by the multiplexed data receiving step, gives a telephone audio data transmission/reception start instruction to the telephone audio transmitting/receiving step to start transmitting/receiving the telephone audio data, gives an audio data extraction stop instruction to the extracting step to stop extracting the audio data, and gives a received telephone audio data switch instruction to the switching control step to switch to the received telephone audio data, and in a case of detecting the end event generation while the multiplexed data is received by the multiplexed data receiving step, gives a telephone audio data transmission/reception stop instruction to the telephone audio transmitting/receiving step to stop transmitting/receiving the telephone audio data, gives an audio data extraction start instruction to the extracting step to start extracting the audio data, and gives an extracted audio data switch instruction to the switching control step to switch to the extracted audio data,

wherein the telephone audio transmitting/receiving step, in a case of receiving the telephone audio data

step, starts transmitting/receiving the telephone audio data,
and in a case of receiving the telephone audio data
transmission/reception stop instruction from the instructing
step, stops transmitting/receiving the telephone audio data,

5 wherein the extracting step, in a case of receiving the
audio data extraction stop instruction from the instructing step,
stops extracting the audio data, and in a case of receiving the
audio data extraction start instruction, starts extracting the
audio data, and

10 wherein the switching control step, in a case of receiving
the received telephone audio data switch instruction from the
instructing step, switches the input to the audio output step
to the received telephone audio data, and in a case of receiving
the extracted audio data switch instruction from the instructing
15 step, switches the input to the audio output step to the extracted
audio data.

9. The communication method according to claim 8, wherein
the multiplexed data receiving step receives multiplexed data
20 including video data and text data, and

 wherein the extracting step extracts the video data from
the multiplexed data, and also extracts the text data in a
prescribed case,

 the communication method, further comprising:

that was extracted by the extracting step, and in a case where the text data was extracted by the extracting step, outputting extracted text data that was extracted,

wherein the instructing step gives a text data extraction
5 start instruction to the extracting step to start extracting the text data in a case of detecting one of the receive event generation and the send event generation while the multiplexed data is received by the multiplexed data receiving step, and gives a text data extraction stop instruction to the extracting
10 step to stop extracting the text data in a case of detecting the end event generation while the multiplexed data is received by the multiplexed data receiving step, and

wherein the extracting step starts extracting the text data in a case of receiving the text data extraction start
15 instruction from the instructing step, and stops extracting the text data in a case of receiving the text data extraction stop instruction from the instructing step.